DOCKET NO. 77

CONNECTICUT SITING

COUNCIL

AN APPLICATION OF METRO MOBILE CTS OF FAIRFIELD COUNTY, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR CELLULAR TELEPHONE ANTENNAS AND ASSOCIATED EQUIPMENT IN THE TOWN OF TRUMBULL, CONNECTICUT.

August 4, 1987

FINDINGS OF FACT

- 1. Metro Mobile CTS of Fairfield County, Inc. (Metro Mobile), in accordance with the provisions of Sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on April 16, 1987, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of a facility consisting of telecommunications antennas and associated equipment to provide domestic public cellular radio telecommunications service (cellular service) in the Town of Trumbull within the Bridgeport New England County Metropolitan Area (Bridgeport NECMA). (Record)
- 2. The fee as prescribed by Section 16-50v-1 of the Regulations of State Agencies (RSA) accompanied the application. (Record)
- 3. The Council and its staff made an inspection of the proposed Trumbull site on June 17, 1987. (Record)

- 4. Pursuant to Section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this application in the Trumbull High School in Trumbull, Connecticut; beginning at 7:00 P.M. on June 17, 1987. (Record)
- 5. The parties to the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)
- 6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS. (Record)
- 7. The Council took administrative notice of its record in dockets 40, 44, 45, 50, 56, 58, 62, 67, 69, 73 and 75 in their entirety. (Tr., p. 17)
- 8. Cellular service consists of small, overlapping broadcast regions, two to ten miles in diameter, known as cells. Each cell is served by a transmitter limited by the Federal Communications Commission (FCC) to no more than 100 watts effective radiated power per channel. Each cell has a central switching point containing electronic apparatus uniting the cells into a system. Mobile units are limited by the FCC to a maximum of seven watts of transmitted power. (Docket 56B, finding 10)

- 9. The FCC requires that a licensee serve at least 75 percent of its licensed service area within three years of obtaining an operating license or risk losing the license. (Docket 56B, finding 11)
- 10. Cellular service is a mobile telephone service. To date, the Department of Public Utility Control (DPUC) has regulated mobile telephone service. Eventually, cellular service could replace the less effective, existing simplex mobile service. The FCC has classified cellular service as a form of basic local exchange service, which also would be subject to DPUC regulation. (Docket 56B, finding 12)
- 11. The FCC has determined that a national public need exists to improve the present mobile telephone service, due to the current systems's limited capacity, long waiting lists nationally, and poor quality service, which have created congested channels and long waiting times. (Docket 56B, finding 13)
- 12. The FCC has established the technical standards for cellular service to ensure the efficient use of the allotted frequency spectrum and to ensure nationwide compatibility. (Docket 56B, finding 14)
- 13. The FCC has pre-empted the state's regulation of cellular service in three major areas: technical standards, market structure, and state certification prior to federal application for a construction permit. (Docket 56B, finding 15)

- 14. Applicants for FCC cellular system authorizations are not required to demonstrate a public need for cellular service, because the FCC has exercised its primary jurisdiction to determine that there is a need for cellular service generally and to encourage the development of cellular service nationwide. (Docket 56B, finding 16)
- 15. The FCC has acknowledged state jurisdiction with respect to charges, classifications, practices, services, facilities, and regulation of service by licensed carriers. (Docket 56B, finding 17)
- 16. According to FCC rules, there must be two licenses awarded in each NECMA to provide competition. One is awarded to a wireline company, the other to a non-wireline company. (Docket 56B, finding 18)
- 17. The FCC defines a "reliable service contour" as an area having a signal quality greater than our equal to 39 dBu. The FCC requires 75 percent coverage of the cellular geographic service area. (Docket 56B, finding 17)
- 18. The FCC requires Metro Mobile to cover at least 75 percent of the Bridgeport NECMA by January 28, 1988, in accordance with its construction permit. The proposed Trumbull site, along with sites previously approved in Greenwich, Stamford, and Shelton, would provide coverage to 70.4 percent of the Bridgeport NECMA. Additional coverage of the NECMA would be provided by future cell sites. (Metro Mobile 1, pp. 16-17)

- 19. Metro Mobile proposes to attach cellular antennas to an existing 486-foot communications tower in the Town of Trumbull. The tower is 200 feet west of the Trumbull/Shelton town line at the end of Video Lane. The tower is owned by Hi-Ho Tower, Inc. (Metro Mobile 1, pp. 9-10; Metro Mobile 1, Exhibit 2, p. 1)
- 20. Metro Mobile would attach three eight-foot dual reflectorized receive antennas at the 250-foot level of this tower, and two 13-foot whip type transmit antennas with two-foot mountings at the 230-foot level. Ninety-two antennas, including broadcast antennas for two-way radio, commercial radio, and paging services, are currently mounted on this tower. (Metro Mobile 1, pp. 9-10; Tr., pp. 18-19)
- 21. A 304 square-foot equipment room within an existing building at the base of this tower would house the cellular electronic equipment. (Metro Mobile 1, Exhibit 2, p. 6)
- 22. An existing road would be used for access. Existing telephone and utility lines would be used. (Metro Mobile, Exhibit 2, p. 7)
- 23. The proposed site has an elevation of 529 feet above mean sea level, and is within an area zoned AA residential. (Metro Mobile 1, Exhibit 2, p. 13)

- The proposed site would provide cellular coverage to Trumbull; portions of Monroe, Easton, Stratford, and Bridgeport; the Merritt Parkway; a portion of Long Island Sound; and Routes 25, 28, 59 and 127. The proposed site would interface with approved sites in Shelton and Milford, and with a planned Fairfield site. (Metro Mobile 1, Exhibit 2, p. 15)
- The proposed cellular antennas broadcast at 870-890 Megahertz.

 The frequencies currently broadcasting on the tower for two-way radio, commercial radio, and paging services broadcast on a much lower frequency. (Tr., pp. 18-19)
- 26. The electromagnetic radio frequency power density at the 230-foot level of the tower would be 0.003188 mW/cm², based on conservative assumptions. This is several orders of magnitude below the American National Standard Institute Safety Standard for the proposed frequency. (Metro Mobile 1, Exhibit 2, p. 6)
- 27. Residents who live near the tower experience radio and television interference, which some residents attribute to the existing antennas on the tower. (Tr., pp. 21-56)
- The interference experienced by residents who live near the tower is likely caused by antennas which operate at frequencies which are near the bands where the interference occurs, which are below the frequencies at which cellular antennas operate.

 (Tr., p. 46)

- 29. The FCC specified the technical standards used in cellular service so that there is minimal chance of cellular signals causing interference with other forms of radio or television communications. (Docket 40, Exhibit 1, Section IV, p. 3)
- 30. Metro Mobile has not received any complaints of television or radio interference from cellular frequencies in the areas of the country in which it provides cellular service. (Tr., p. 38)
- 31. Metro Mobile investigated several alternative sites in the Trumbull area. Property at 566 Booth Hill Road was investigated, but the owner was not interested in leasing or selling the property. Property at 439 Waverly Road was investigated, but rejected because of inadequate coverage. Three locations on the perimeter of Beach Park were evaluated, but were rejected due to low elevation and location within a park area. Properties at 34 and 40 Fawn Hill Road were examined, but the owners were not interested in selling or leasing the land. A parcel of land on Daniels Farm Road was investigated, but rejected due to inadequate coverage. (Metro Mobile 1, Attachment 2)
- 32. The State Historic Preservation Officer has determined that the mounting of antennas on this tower would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

 (Metro Mobile, Exhibit E Supplement)

- 33. There are no known existing or historic records of species classified by the United States government as endangered or threatened, or of species classified by the State of Connecticut as being of special concern, occurring at the proposed site. (Metro Mobile 1, Exhibit E, p. 7)
- 34. The proposed Trumbull facility construction, equipment, and improvement costs are estimated as follows:

Radio equipment	\$196,691.00
Antennas	25,900.00
Standby power	6,800.00
Equipment shelter	35,000.00
Miscellaneous costs,	
(including site pre-	
paration and installa-	
tion)	32,000.00

TOTAL \$296,391.00

(Metro Mobile 1, p. 4, p. 19)

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